

# Acronyms & Abbreviations

**A**

**A-ring** Outermost of Saturn's main rings

**AACS** Attitude and articulation control subsystem

**ACC** Accelerometer

**ACP** Aerosol Collector and Pyrolyser (Huygens science instrument)

**AFC** AACS Flight Computer

**AQ60** Material used for Huygens Probe heat tiles

**ASI** Agenzia Spaziale Italiana, the Italian space agency

**ASIC** Application-specific integrated circuit

**AU** Astronomical unit, the mean distance from Earth to Sun = 149,597,870.694 kilometers

**B**

**B-ring** Brightest and densest of Saturn's rings

**BIU** Bus interface unit

**C**

**C-ring** Faint ring inward of Saturn's B-ring

**C-type** Asteroid material, rich in carbon

**C<sub>2</sub>H<sub>2</sub>** Acetylene

**C<sub>2</sub>H<sub>4</sub>** Ethylene

**C<sub>2</sub>H<sub>6</sub>** Ethane

**C<sub>3</sub>H<sub>8</sub>** Propane

**CH<sub>4</sub>** Methane

**CAPS** Cassini Plasma Spectrometer (Orbiter science instrument)

**CDA** Cosmic Dust Analyzer (Orbiter science instrument)

**CDS** Command and data subsystem

**CIRS** Composite Infrared Spectrometer (Orbiter science instrument)

**CRAF** Comet Rendezvous/Asteroid Flyby spacecraft or mission

**DSN**

Deep Space Network (tracks operating spacecraft)

**DWE**

Doppler Wind Experiment (Huygens science instrument)

**E**

**E-ring** Outermost Saturn ring

**EGA** Engine gimbal actuator

**EGE** Engine gimbal electronics

**ESA** European Space Agency

**F**

**F-ring** Narrow ring outward of A-ring

**G**

**G-ring** Diffuse ring at inner edge of E-ring

**GCMS** Gas Chromatograph and Mass Spectrometer (Huygens science instrument)

**GHz**

Gigahertz (billions of cycles per second)

**H**

**H<sup>+</sup>** Hydrogen atom with one electron removed, i.e., a proton

**H<sub>2</sub><sup>+</sup>** Hydrogen molecule with one electron removed

## APPENDIX B

<b>H<sub>2</sub>O<sup>+</sup></b>	Water molecule with one electron removed	<b>M</b>	<b>P</b>
<b>HASI</b>	Huygens Atmospheric Structure Instrument (Huygens science instrument)	<b>MAG</b>	Dual Technique Magnetometer (Orbiter science instrument)
<b>HC<sub>3</sub>N</b>	Cyanoacetylene	<b>MAPS</b>	Magnetospheric and Plasma Science
<b>HCN</b>	Hydrogen cyanide	<b>MIMI</b>	Magnetospheric Imaging Instrument
<b>He<sup>++</sup></b>	Helium atom with two electrons removed, i.e., an alpha particle	<b>MP</b>	Magnetopause (outer edge of Saturn's magnetic field)
<b>HGA</b>	High-gain antenna	<b>N</b>	
		<b>N<sup>+</sup></b>	Nitrogen atom with one electron removed
<b>INMS</b>	Ion and Neutral Mass Spectrometer (Orbiter science instrument)	<b>N<sub>2</sub></b>	Nitrogen molecule
<b>IRI</b>	Inertial reference interface	<b>NASA</b>	National Aeronautics and Space Administration
<b>IRU</b>	Inertial reference unit	<b>O</b>	
<b>ISS</b>	Imaging Science Subsystem (Orbiter science instrument)	<b>O<sup>+</sup></b>	Oxygen atom with one electron removed
		<b>ODM</b>	Orbiter deflection maneuver
<b>JPL</b>	Jet Propulsion Laboratory	<b>OH</b>	Hydroxyl radical
		<b>OH<sup>+</sup></b>	Hydroxyl radical with one electron removed
<b>LGA1</b>	Low-gain antenna #1	<b>ORS</b>	Optical remote sensing
<b>LGA2</b>	Low-gain antenna #2		
			<b>R</b>
			<b>RADAR</b> Cassini Radar (Orbiter science instrument)
			<b>RFES</b> Radio frequency electronics subsystem
			<b>RFS</b> Radio frequency subsystem
			<b>RPWS</b> Radio and Plasma Wave Science (Orbiter science instrument)
			<b>R<sub>s</sub></b> Unit of distance in radii of Saturn (one R <sub>S</sub> = 60,330 kilometers)
			<b>RSS</b> Radio Science Instrument (Orbiter science instrument)
			<b>RTG</b> Radioisotope thermoelectric generator
			<b>RWA</b> Reaction wheel assembly
			<b>RWI</b> Reaction wheel interface

## APPENDIX B

S		T		V	
<b>S</b>	Bow shock sunward of Saturn's magnetic field	<b>TCS</b>	Temperature control subsystem	<b>VDE</b>	Valve drive electronics
<b>SED</b>	Saturn electrostatic discharge			<b>VHSIC</b>	Very high-speed integrated circuit
<b>SKR</b>	Saturn kilometric radiation	<b>UK</b>	United Kingdom	<b>VIMS</b>	Visible and Infrared Mapping Spectrometer (Orbiter science instrument)
<b>SOI</b>	Saturn orbit insertion	<b>US</b>	United States	<b>VVEJGA</b>	Venus–Venus–Earth–Jupiter Gravity Assist
<b>SRMU</b>	Solid Rocket Motor Upgrade (part of Titan IV launch vehicle)	<b>UVIS</b>	Ultraviolet Imaging Spectrograph (Orbiter science instrument)		
<b>SRU</b>	Stellar reference unit				
<b>SSE</b>	Sun sensor electronics				
<b>SSH</b>	Sun sensor head				
<b>SSP</b>	Surface Science Package (Huygens science instrument)				